



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,011	04/08/2004	Chee Kiang Yew	1342.P001US-CIP/GDL/ayu	7538

38556 7590 01/04/2007  
LAWRENCE Y.D. HO & ASSOCIATES PTE LTD  
30 BIDEFORD ROAD, #07-01, THONGSIA BUILDING  
SINGAPORE, 229922  
SINGAPORE

EXAMINER
----------

CHANG, RICK KILTAE

ART UNIT	PAPER NUMBER
----------	--------------

3726

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/820,011

Applicant(s)

YEW ET AL.

Examiner

Rick K. Chang

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 22-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Election/Restrictions***

1. Applicant's election with traverse of Group I and Species 1 in the reply filed on 10/30/06 is acknowledged. Applicant's election with traverse of Group I in Paper No. 5 is acknowledged. The traversal is on the ground(s) that the subject matter of elected claims is sufficiently related to the subject matter of non-elected claims. This is not found persuasive because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement. Furthermore, these inventions are distinct for the reasons given in the restriction requirement and have acquired a separate status in the art as shown by their different classification and/or have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

The requirement is still deemed proper and is therefore made FINAL.

***Double Patenting***

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Art Unit: 3726

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-21 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-28 of U.S. Patent No. 7,089,661. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both disclose encapsulating, COB and other electronic components, tie-bars, etc.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-2 are rejected under 35 U.S.C. 102(a) as being anticipated by Admitted Prior Art (hereinafter referred to as “APA”; Specification Pages 1-2).

APA discloses small size memory cards in Page 1, lines 13-20 using a PCB with leads and die pads, mounting dies such as microchips, bonding wires, encapsulating the populated PCB with a two-piece plastic; molding is disclosed in Page 2, lines 6-11).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3726.

7. Claims 3-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (hereinafter referred to as "APA"; Specification Pages 1-2) in view of Muramatsu et al (US 6,110,755), and further in view of Official Notice.

APA discloses encapsulating the populated PCB with a two-piece plastic. APA fails to disclose encapsulating the top side only, at least one tie bar extending to a peripheral frame, injection molding, and other limitations disclosed in claims 3-13 not mentioned above.

Muramatsu discloses in Fig. 2 at least one tie bar extending to a peripheral frame (20, 20c and 22); cutting the ties Fig. 8; simultaneously molding Figs. 6-7 and 20 is held by 40.

Official Notice is taken that injection molding having multiple injection ports and encapsulating as disclosed by APA as noted above as a second step to molding as disclosed in Muramatsu in Figs. 6-7 to provide even distribution of resin encapsulant and protect from environment and wear and tear as well as to provide write-protect means and electrical communication ports.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify APA by encapsulating the top side only, at least one tie bar extending to a peripheral frame, injection molding, and other limitations disclosed in claims 3-13 not mentioned above, as taught by Muramatsu and Official Notice, for the purpose of providing a stable platform during injection molding and even distribution of resin encapsulant and protect from environment and wear and tear as well as to provide write-protect means and electrical communication ports.

8. Claims 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (hereinafter referred to as "APA"; Specification Pages 1-2).

Art Unit: 3726

APA teaches the invention as described with respect to claims 1-2.

APA fails to disclose COB and MCM as well as other limitations in claims 16-19.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide COB and MCM as well as other limitations in claims 16-19 because these electronic components are integral part of memory cards to hold data as disclosed in APA.

9. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (hereinafter referred to as "APA"; Specification Pages 1-2) in view of Yamamoto (US 4,737,602).

APA fails to disclose openings for contact pads or pins and write-protect means inserted into a groove and slidable along the groove.

Yamamoto discloses openings for contact pads or pins and write-protect means inserted into a groove and slidable along the groove (Figs. 1-2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify APA by providing openings for contact pads or pins and write-protect means inserted into a groove and slidable along the groove, as taught by Yamamoto, for the purpose of providing electrical communication between a PC to a memory card to store MP3 songs and preventing unwanted or unauthorized overwriting MP3 songs.

### *Conclusion*

**10. Please provide reference numerals (either in parentheses next to the claimed limitation or in a table format with one column listing the claimed limitation and another column listing corresponding reference numerals in the remark section of the response to**

Art Unit: 3726

**the Office Action) to all the claimed limitations as well as support in the disclosure for better clarity (optional). Applicants are duly reminded that a full and proper response to this Office Action that includes any amendment to the claims and specification of the application as originally filed requires that the applicant point out the support for any amendment made to the disclosure, including the claims. See 37 CFR 1.111 and MPEP 2163.06.**

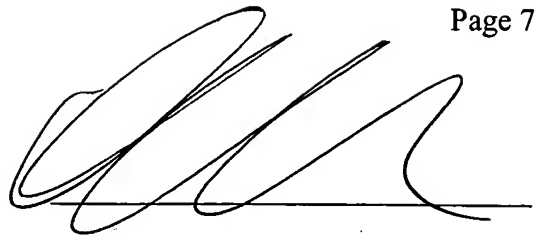
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick K. Chang whose telephone number is (571) 272-4564. The examiner can normally be reached on 5:30 AM to 1:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/820,011  
Art Unit: 3726

Page 7

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke at the end, positioned above a solid horizontal line.

**RICHARD CHANG  
PRIMARY EXAMINER**

RC  
December 22, 2006